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Art Unit 2189
Serial No.: 10/633,090

Reply to Office Action of: 09/26/2006
Attorney Docket No.: K35A1324

REMARKS

The Applicant thanks the Examiner for his careful and thoughtful examination of the present application. By way of summary, Claims 1-16 were pending in this application. In this Response, Claims 1-16 have been canceled, and Claims 17-30 have been added. Accordingly, Claims 17-30 remain pending for consideration.

NEW CLAIMS

Applicant respectfully submits that, for the reasons previously submitted in the Office Action Responses of January 16 and July 10, 2006, Claims 1-16 are allowable over the prior art. However, to expedite prosecution of the present application, new Claims 17-30 have been added and are believed to be fully distinguished over the prior art of record.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 102(b)

The Office action rejected Claims 1-3, 7, 9-11 and 15 under 35 U.S.C. § 102 as being anticipated by U.S. patent no. 6,418,516, issued to Arimilli *et al.* (Arimilli). Applicant respectfully submits that this rejection fails with respect to new Claims 17-30 because Arimilli fails to identically teach every element of the claims. See M.P.E.P. § 2131 (stating that in order to anticipate a claim, a prior art reference must identically teach every element of the claim).

For example, Claim 17 recites "sending the non-instruction data uncached from the buffer manager to the micro-controller via the micro-controller cache system." Arimilli neither teaches nor discloses this limitation.

Comparing Arimilli with Applicant's earlier pending Claim 1, the Examiner has indicated that "if the requested data is non-instruction data and [does] not reside in the cache then the non-instruction data should bypass the instruction cache memory [in Arimilli] (See figure 7) and providing the non-instruction data without caching the non-

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instruction data. Non-instruction data isn't stored to an instruction cache memory. Therefore, Applicant's claimed invention works like instruction cache."

Applicant respectfully submits that Claim 17 clarifies the earlier claim language by stating that the non-instruction data is sent uncached from the buffer manager to the micro-controller via the micro-controller cache system. In Fig. 7 of Arimilli, it is clearly illustrated that non-instruction data is cached in L1 Data Cache 306, and Fig. 6 illustrates that non-instruction data is always cached before being provided to the micro-controller. Thus, Arimilli has a cache system that functions identically to the prior art systems discussed in Applicant's background: "[i]n prior art cache systems, a so-called 'Harvard' architecture has been used which attempts to solve the foregoing problem by providing separate cache structures for instructions and data." Arimilli cannot read on Claim 17, as it does not disclose non-instruction data that is sent uncached via the micro-controller cache system.

Claim 24 similarly recites a micro-controller cache system adapted to "send the non-instruction data uncached from the buffer manager to the micro-controller via the micro-controller cache system." Arimilli neither teaches nor discloses such a system.

For reasons similar to those discussed above with respect to Claim 17, Applicant submits that Arimilli does not teach or suggest a micro-controller cache system adapted to send non-instruction data uncached from the buffer manager to the micro-controller via the micro-controller cache system.

The remaining dependent claims are believed to be patentable over Examiner's cited prior art for the same reasons articulated above with respect to Claims 17 and 24, and because of the additional features recited therein.

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CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the pending claims are now in condition for allowance and requests reconsideration of the rejections. If it is believed that a telephone conversation would expedite the prosecution of the present application, or clarify matters with regard to its allowance, the Examiner is invited to contact the undersigned attorney at the number listed below.

The Commissioner is hereby authorized to charge payment of any required fees associated with this Communication or credit any overpayment to Deposit Account No. 23-1209.

Respectfully submitted,

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